

# clarion®

**Owner's manual**

**Manuel d' installation et d'emploi**

**Manual de Instalación/Propietario**

## **BLT370**

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**BLUETOOTH® AUDIO/MOBILE-PHONE  
TRANSCEIVER FOR AUX INPUT**

**EMETTEUR-RECEPTEUR AUDIO/TEL-  
PHONE MOBILE BLUETOOTH® POUR  
ENTREE AUX**

**TRANSCEPTOR DE TELÉFONO MÓVIL/  
AUDIO BLUETOOTH® PARA ENTRADA  
AUXILIAR**

## FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

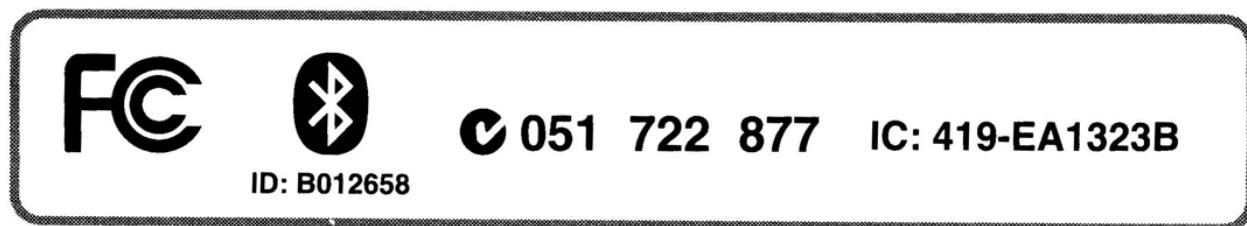
## Clarion BLT370

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# CLARION PRODUCT REGISTRATION INFORMATION

For USA and Canada only

Dear Customer:

[www.clarion.com](http://www.clarion.com)

Congratulations on your purchase of a Clarion mobile electronic products. We are confident that you'll enjoy your Clarion experience.

There are many benefits to registering your product. We invite you to visit our website at [www.clarion.com](http://www.clarion.com) to register your Clarion product.

We have made product registration simple with our easy to use website. The registration form is short and easy to complete. Once you're registered, we can keep you informed of important product information.

Register at [www.clarion.com](http://www.clarion.com) - it's easy to keep your Clarion product up to date.

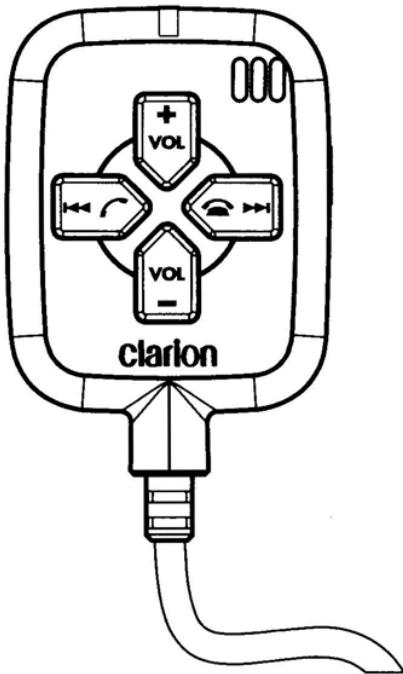
English

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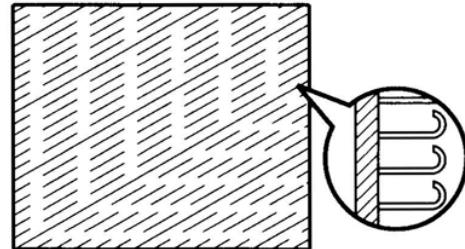
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# 1. WHAT IS INCLUDED IN THIS PACKAGE?

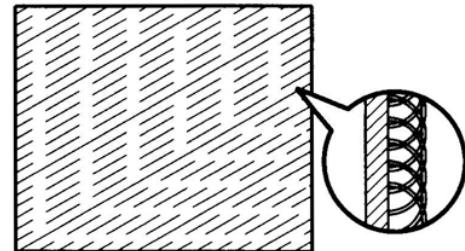
A complete BLT370 package consist of the following items:



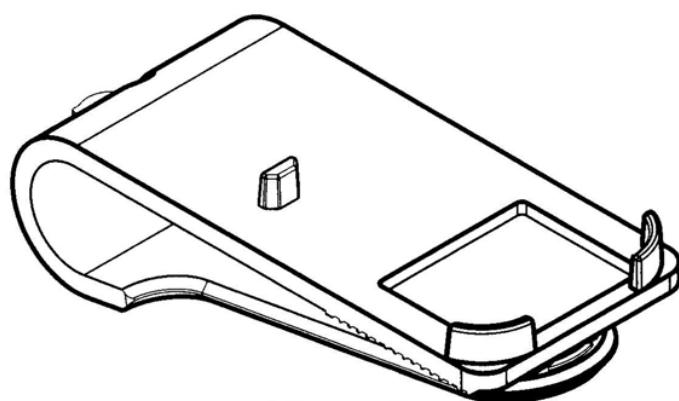
*Bluetooth®* Audio/Mobile-phone Transceiver unit with 2.5m cable and LC box



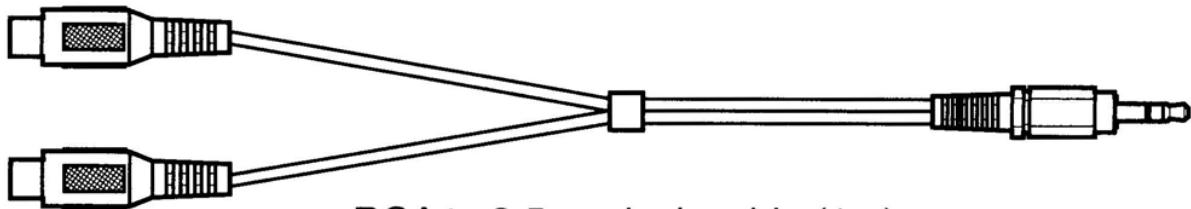
Velcro hook (x2) with double-sided tape attached



Velcro loop (x2) with double-sided tape attached



Visor clip



RCA to 3.5mm jack cable (1m)

## 2. PRODUCT FEATURES OVERVIEW

### Clarion *Bluetooth*® Audio/Mobile-phone Transceiver (BLT370)

The BLT370 is a handsfree car kit featuring *Bluetooth*® wireless technology that allows you to utilize your car's built-in audio system for wireless music streaming and wireless mobile phone handsfree communication.

- **Auto features:**

- Auto-power up when car is started
- Auto-connect with last paired mobile phone, upon power up (Depends on multiple re-connection mode).
- Auto-switching between music streaming and handsfree mode with *Bluetooth*® technology

- **Music streaming features:**

- High quality wireless digital music streaming (dependent on paired device capabilities)
- Remote control for remote device (dependent on paired device capabilities)
- Volume adjustment

- **Car kit features:**

- Auxiliary output for plugging into car stereo system
- Tel-interrupt pin to switch car stereo to auxiliary-mode for mobile phone communication
- Built-in microphone, with optional external microphone support.
- Acoustic Echo Cancellation (AEC) and noise suppression
- Left/Right channel switch (to set speaker output channel)
- One-press pick-up/end/reject call and volume controls
- Call transfer
- Volume adjustment

## 2. PRODUCT FEATURES OVERVIEW

- **Telephone interrupt pin**

The cable on the Transceiver is equipped with a telephone interrupt pin (TEL-INT). Such mechanism can be used to notify the car stereo unit to switch mode when it detects incoming call and transferring call.

- **Automatic *Bluetooth*® profile switch**

If the Transceiver is paired to both a **Clarion Bluetooth® Audio Transmitter and Cradle for iPod®**<sup>1</sup> and a mobile phone, when there is an incoming call, a stereo ringing tone will be heard and any music streaming will be temporarily muted until call is ended or rejected.

- **Acoustic Echo Cancellation**

Voice signals from the loudspeaker often appear at the microphone, this causes conversational interference in the form of acoustic echo and howling. With this advanced DSP-based Acoustic Echo Cancellation (AEC) system built-in, it is capable of handling full-duplex communication, echo cancellation and noise suppression on the microphone input to enable smooth handsfree communication and crystal clear speech.

- **Separate volume control**

There are two set of volume settings, one for handsfree mode and one for music mode. This can ensure that the user can set the desired volume for speech and music separately without having to change the volume when picking up and ending call between music streaming.

**Note:**

<sup>1</sup> **Clarion Bluetooth® Audio Transmitter and Cradle for iPod® (DGL370 and BC001N/BC002M/BC003V)** are Clarion products (sold separately) that supports music streaming via *Bluetooth*® wireless technology. Please consult your local authorized Clarion dealer for more information about the product.

## Installing BLT370

This Transceiver unit is used to receive audio signals via *Bluetooth®* wireless technology from other *Bluetooth®* device and stream it to the car audio system. The attached cable has a pair of auxiliary output, a 12V power connector (with LC box attached) and a TEL-INT (Telephone interrupt) pin.

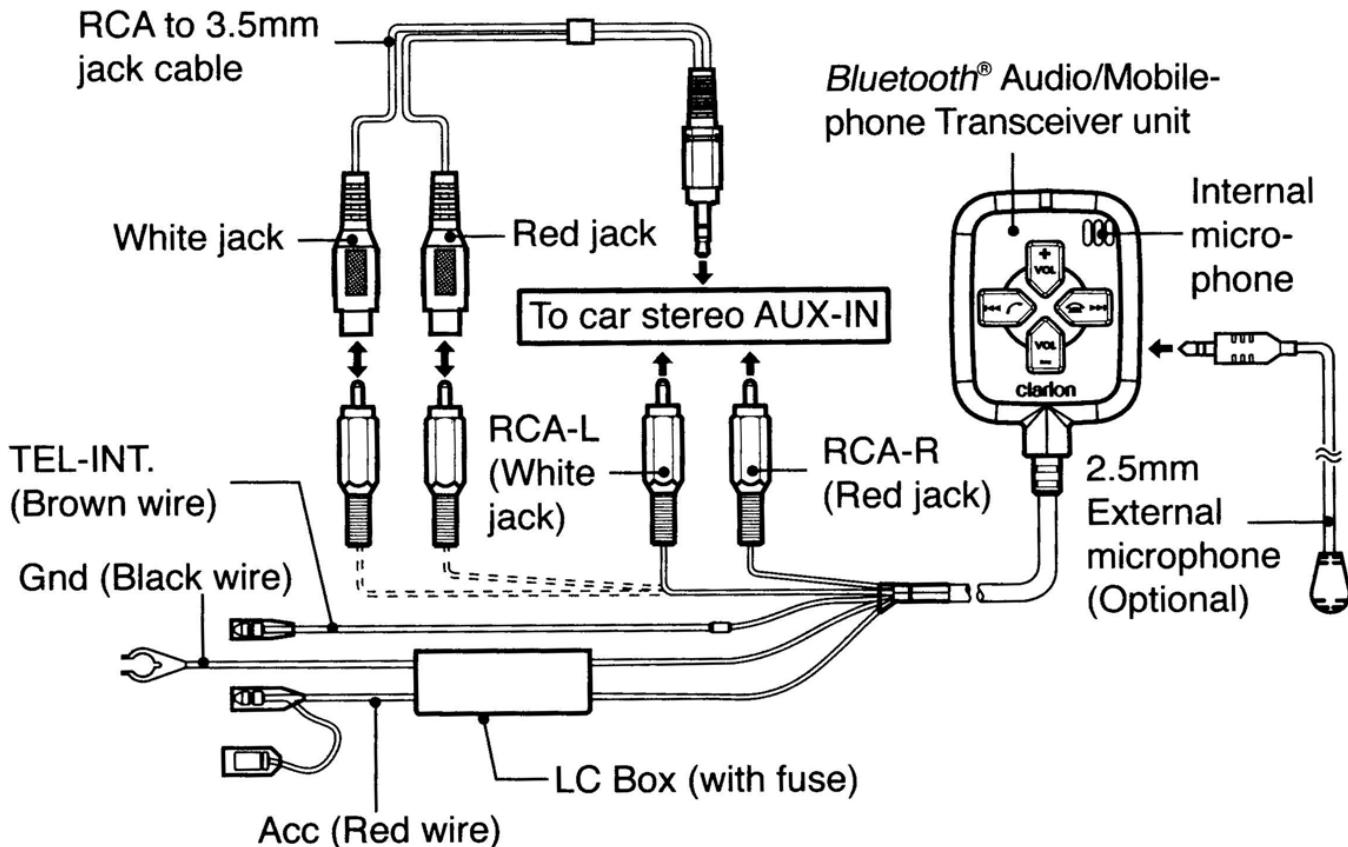


Figure 1: System diagram

## Instructions

1. Connect the 12V (Acc and Gnd) to car supply.
2. Connect the RCA-L and RCA-R to car stereo auxiliary (AUX) input. Alternately, you can use the RCA to 3.5mm jack cable (included) to connect to car stereo that supports 3.5mm AUX input.
3. Connect TEL-INT. pin to car stereo telephone mute line (if this feature is supported).
4. Make sure that the car stereo system's telephone interrupt is ON.

### 3. INSTALLATION

5. Use Velcro with double-sided tape to hold the visor and Transceiver unit if necessary. (shown in Fig. 2). Detail of using Velcro will be explained as the followings:
  - Step 1: Attach the Velcro hook to the visor clip with the double-sided tape provided.
  - Step 2: Attach the Velcro loop to the hook.
  - Step 3: Attach the Transceiver unit to the Velcro loop with the double-sided tape provided.
6. Secure the Transceiver unit to a location that is easily accessed by the driver e.g. sun visor (shown in Fig. 3) and dash board (shown in Fig. 4).
7. Set the left/right channel switch according to the position of driver (see "**Switching left or right channel output**" on page 23 for details).
8. Once the car is started, the Transceiver is powered on immediately. It cannot be turned off as long as the ignition key is turned to ON or ACC position.

**Notes:**

- Check that the location of the Transceiver is adequate to pick-up the car driver voice.
- Alternately, user can use the external microphone (optional) that plug into the 2.5mm audio jack input for a better voice reception.

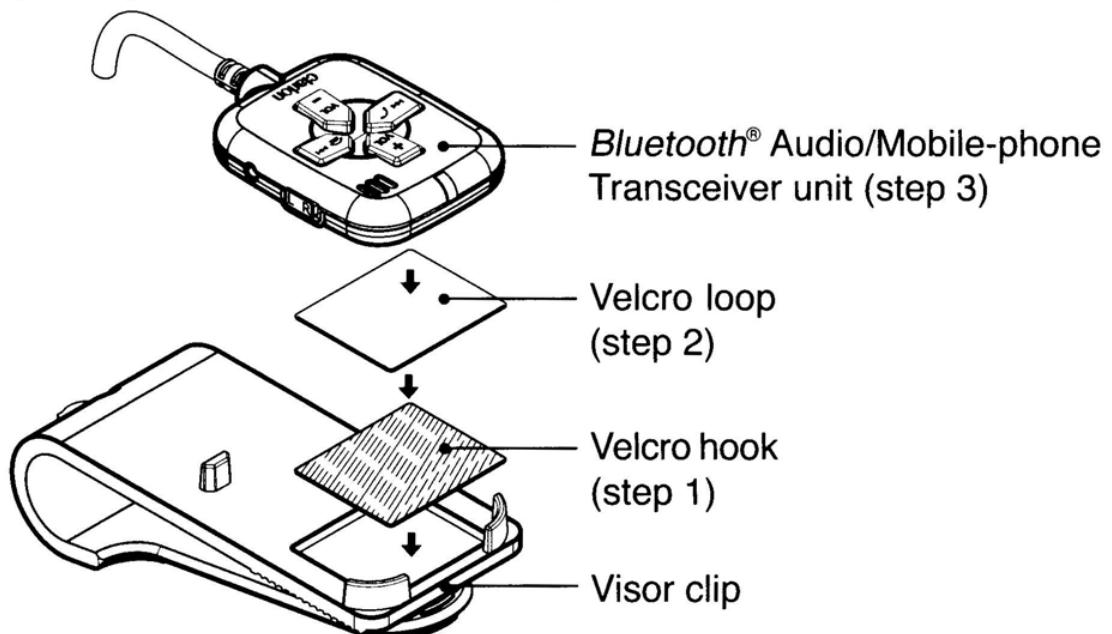


Figure 2: Using Velcro with double-sided tape

### 3. INSTALLATION

English

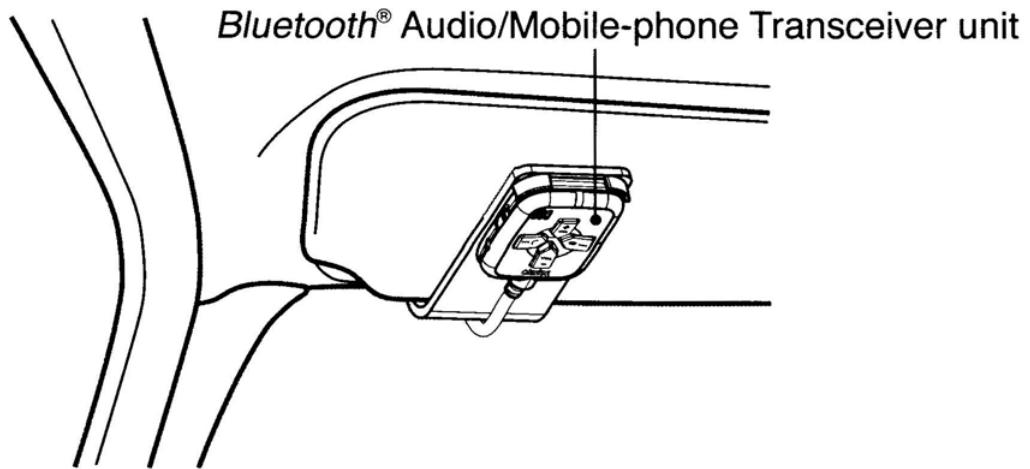


Figure 3: Fix the BLT370 to the car sun visor

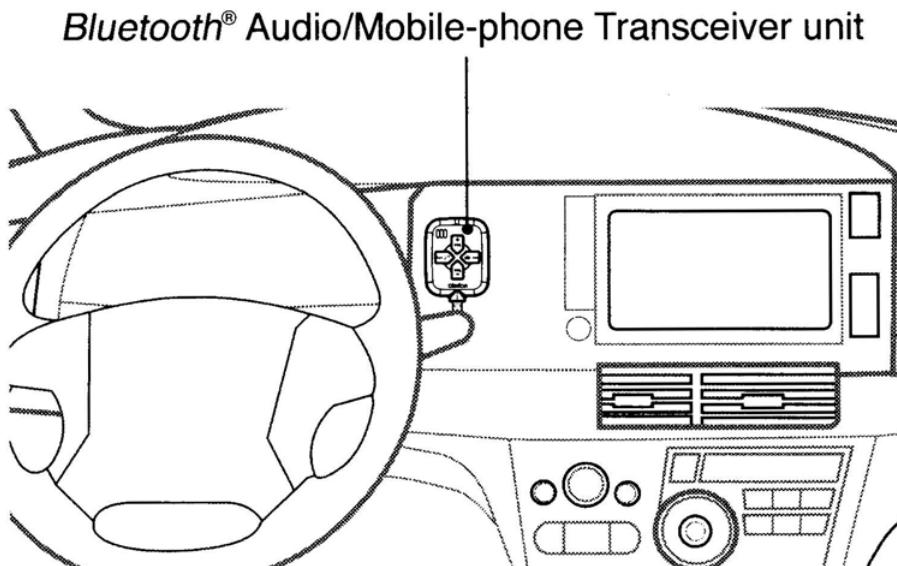


Figure 4: Fix the BLT370 to the dashboard

#### ⚠ CAUTION

- Please refer carefully to the **system diagram** before installing your BLT370. Incorrect wiring method may cause damage to BLT370, your car audio system or even your vehicle.
- We strongly recommend that BLT370 is only installed by those fully familiar with your vehicle's electrical system, please consult with the supply retailer if any doubt.

## 4. INTRODUCTION TO *BLUETOOTH®* “PAIRING”

English

### What is *Bluetooth®* wireless technology?

*Bluetooth®* wireless technology is a radio technology that connects devices, such as mobile phones and headsets, without wires or cords over a short distance of approximately 10 meters (approx. 33 feet). Get more information at [www.bluetooth.com](http://www.bluetooth.com).

### What is *Bluetooth®* wireless profiles?

*Bluetooth®* wireless profiles are the different ways that *Bluetooth®* devices communicate with other devices. *Bluetooth®* phones support either the headset profile (HSP), the hands-free profile (HFP) or both. In order to support a certain of profiles, a phone manufacturer must implement certain mandatory features within the phone's software. The *Bluetooth®* Audio/Mobile-phone Transceiver unit supports both HSP and HFP profiles. In addition, it also supports A2DP and AVRCP in order to allow music streaming and playback control. Please refer chapter “**Music Streaming and Playback Control**” on page 19 for more description on these profiles.

### What is pairing?

With a mobile phone featuring *Bluetooth®* technology, you must “pair” the Transceiver unit with the phone/*Bluetooth®* Audio Transmitter before you use it for the first time.

“**Pairing**” creates a unique wireless link between the phone/*Bluetooth®* Audio Transmitter with *Bluetooth®* wireless technology and your *Bluetooth®* Audio/Mobile-phone Transceiver unit eliminating the need to repeat the pairing process during future use. *Bluetooth®* devices will not work if the devices have not been paired.

### What is passkey?

Passkey or PIN is a code that you enter on your mobile phone to pair it with the Transceiver unit. This makes your phone and the Transceiver unit recognize each other and automatically work together.

## 4. INTRODUCTION TO BLUETOOTH® “PAIRING”

### Pairing Sequence

English

#### Note:

- Please refer to Clarion *Bluetooth®* Audio Transmitter and Cradle for iPod owner's manual for the *Bluetooth®* Audio Transmitter operation below.

#### Between *Bluetooth®* Audio/Mobile-phone Transceiver and *Bluetooth®* Audio Transmitter

1. Make sure the Transmitter is connected to an audio source.
2. Make sure the car stereo source mode is switched to 'AUX' mode.
3. Set the Transceiver unit in pairing mode. Please refer "**Activating *Bluetooth®* Transceiver pairing mode**" on page 17.
4. Set the Transmitter unit in pairing mode.
5. Music starts automatically upon successful pairing.

#### Notes:

- You do not have to enter a dedicated pin code for pairing these two devices, as you do with a mobile phone.
- During pairing mode, the Transceiver unit should show a slower alternate red/blue LED. Make sure that the Transmitter and Transceiver are not paired to any other Transceiver or Transmitter respectively.
- Please refer "**Understanding The Transceiver Unit Indicators**" on page 16 for further details.

## 4. INTRODUCTION TO BLUETOOTH® “PAIRING”

### Between **Bluetooth®** Audio/Mobile-phone Transceiver and mobile phone

1. Activate *Bluetooth®* on your mobile phone. Please check your mobile phone owner's manual for further details.
2. Set the Transceiver in pairing mode. Please refer “**Activating *Bluetooth®* Transceiver pairing mode**” on page 17.
3. Search for new *Bluetooth®* device on the mobile phone. The Transceiver unit's name is “**CLARION\_HSF**”.
4. When attempting to connect to the Transceiver unit, the mobile phone will prompt for a passkey, enter the PIN: “**0000**”.
5. Incoming call will be automatically diverted to the Transceiver unit upon successful connection.

#### Notes:

- Always make sure the *Bluetooth®* operation mode in the phone is on when using a *Bluetooth®* car handsfree.
- During music streaming, pairing with mobile phone at the same time may cause choppy sound.



#### CAUTION

- The Transceiver unit can only pair and connect to ONE mobile phone at a time.
- In order to pair and connect to another mobile phone, user will have to disconnect the current mobile phone first. Please refer your mobile phone owner's manual for disconnecting device.
- The Transceiver unit can pair with the Transmitter unit and mobile phone at the same time as long as both device (Transmitter and mobile phone) do not use the same profiles (A2DP and AVRCP), which are used for music streaming purposes at the same time.

## 4. INTRODUCTION TO BLUETOOTH® “PAIRING”

### Automatic Connection

English

The *Bluetooth*® wireless function in your phone has to be turned on to establish automatic connection.

1. The Transceiver will establish an automatic connection in the following situations:

- After a previously successful connection, and the Transceiver is switched on again, it will automatically try to re-connect with the last paired mobile phone (Depends on multiple re-connection mode). Connection may take up to a minute depending on the mobile phone.
- Some mobile phones will require user confirmation for *Bluetooth*® connection. In such case, user will need to acknowledge the connection on the mobile phone before the connection is re-established.

2. The Transceiver will not establish an automatic connection or fail to connect in the following situations:

- If the mobile phone already has connection with other handsfree/ headset
- If the paired mobile phone is powered off and on (depends on mobile phone)
- If the paired mobile phone is out of range
- If the paired mobile phone is powered on after the Transceiver is turned on where multiple re-connection mode set to off.

In such cases, the user will need to manually re-connect to the Transceiver through the mobile phone.

**Note:**

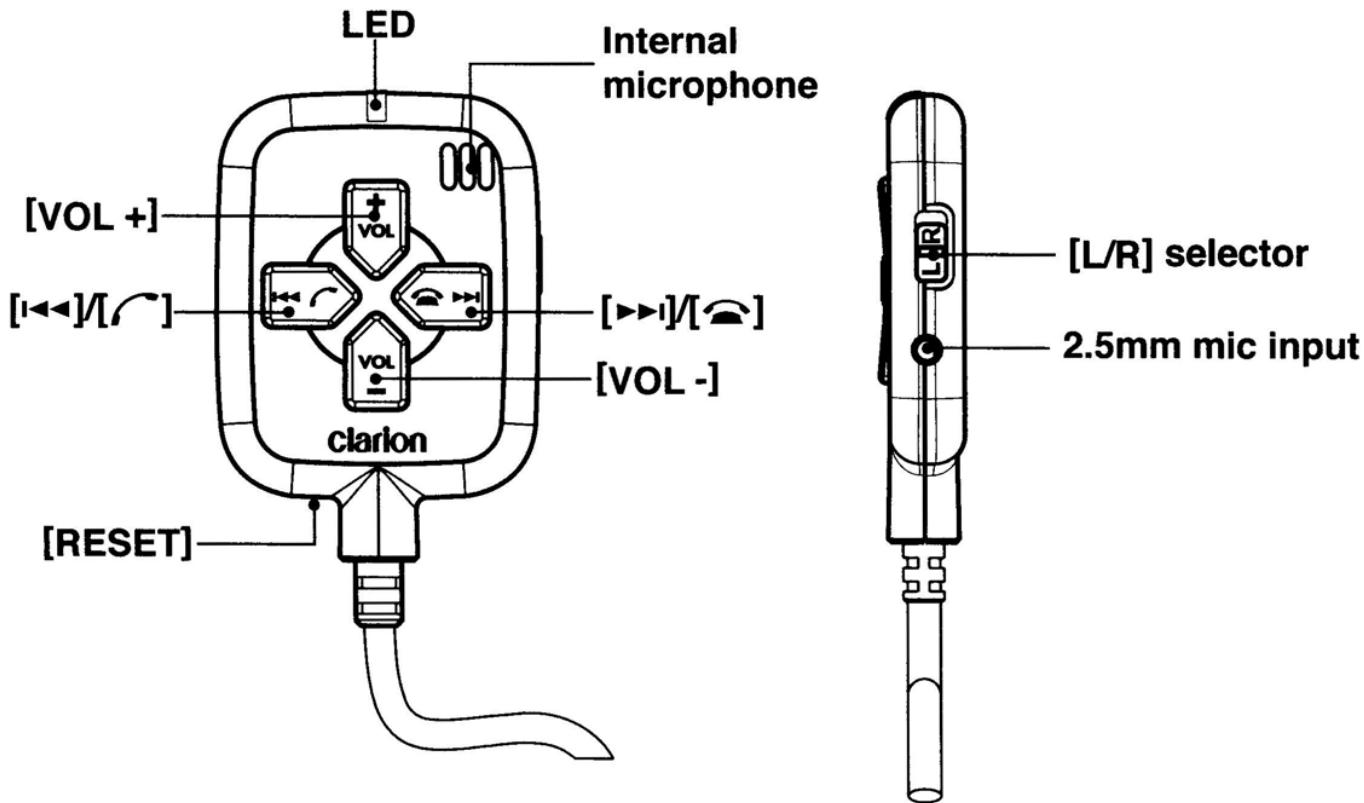
- If the Transceiver is switched off, some mobile phones may take a long time to detect the disconnection.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

English

### Buttons Terminology

Please make sure you have read through chapter “**Installing BLT370**” on page 7 before proceed to the following operations.



#### [◀▶]/[📞] button

- During incoming call, press the button to pick up call.
- During phone conversation, press the button twice to transfer call.
- During music streaming for iPod, press and hold the button for 1 second to restart the current track.
- During music streaming, press and hold the button for 1 second (A2DP device) or 2 seconds (iPod) to move to previous track.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

English

### [>>]/[<<] button

- During incoming call, press the button to reject call.
- During phone conversation, press the button to end call.
- During music streaming for A2DP device or iPod, press and hold the button for 1 second or longer to move to next track.

### [VOL +] button

- Press the button to perform volume up.
- During music streaming, press and hold the button for 1 second or longer to play/pause the track.

### [VOL -] button

- Press the button to perform volume down.
- During music streaming for A2DP device, press and hold the button for 1 second or longer to stop the track.

### [RESET] button

- Use the button to reset the unit.

### [L/R] selector

- Switch to left or right channel output for phone conversation.

### Internal microphone

- Built-in microphone for phone conversation.

### 2.5mm mic input

- Connect to external microphone

### LED

- Indicator that notifies the Transceiver status

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

English

### Understanding The Transceiver Unit Indicators

Event	LEDs	
	Red	Blue
During power on (may auto connect)	Blink once	Lights up for 1-2 sec
During power on (mobile phone pairing info in memory)	Lights up for 2-3 sec	Lights up for 1-2 sec
Powered/ready	Blink once every 5 sec	-
Bluetooth® Pairing mode	Blink alternately every second	
Mobile phone connected (HFP/HSP)	Blink once every 5 sec	Lights up once every 5 secs
Incoming call	Blink alternately and rapidly	
Transmitter connected/ music streaming	Blink once every 5 secs	Blink rapidly
Transmitter and mobile phone connected	Blink once every 5 secs	Blink rapidly and lights up once every 5 secs
Call in progress	Blink once every 5 secs	Blink normally and lights up once every 5 secs
Multiple re-connection mode is turned ON	-	Blinks rapidly for 1-2 sec
Multiple re-connection mode is turned OFF	Blinks rapidly for 1-2 sec	-

#### Notes:

- When both red and blue LEDs are on, LED looks purple.
- Mobile phone with music streaming will be under the same category as “Transmitter and mobile phone connected”.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

English

### Basic Operations

- **Turning on the power**

The unit turns on immediately when power is supplied. It can only be turned off if car engine is off.

- **Resetting the Transceiver unit**

This function is used to restore to factory default setting and clear all the pairing information.

1. Press the **[RESET]** button once to perform reset function.

**Notes:**

- Transceiver will remain as power on state.
- The previously-connected device(s) may still hold the Transceiver information. Thus if the device initiate a *Bluetooth®* connection when the Transceiver is in pairing mode, the connection may be successful.

- **Activating *Bluetooth®* Transceiver pairing mode**

1. Turn on the Transceiver by powering up the car audio system, note that the Red LED blinks once every 5 seconds to confirm that the power is on.
2. Press and hold the **[◀◀]** and **[▶▶]** buttons simultaneously for 2 seconds or longer to activate *Bluetooth®* pairing mode.

**Note:**

- If no device is paired to the Transceiver after 3 minutes, pairing mode will be cancelled.

For more information on *Bluetooth®* pairing, please see chapter “**Pairing Sequence**” on page 11.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

English

### Turning on/off multiple re-connection mode

This function allows user to switch on or off the multiple re-connection mode.

ON: Multiple attempts are made to auto re-connect with the last paired mobile phone (HSP/HFP) when Transceiver is powered up.

OFF: Only 1 attempt is made to auto re-connect with the last paired mobile phone (HSP/HFP) when Transceiver is powered up.

1. When the Transceiver is powered on (no device connected), press and hold the **[VOL +]** and **[VOL -]** buttons simultaneously for 2 seconds or longer to toggle multiple re-connection mode on or off.
2. Auto connection will be observed in the next powered up of the Transceiver based on the multiple re-connection mode setting.

#### Notes:

- Factory default setting is ON.
- Please refer to chapter “**Understanding the Transceiver Unit Indicators**” on page 16 for more information about the LED status.
- The multiple re-connection attempts will be terminated if the Transmitter (DGL370) is connected.
- Resetting the Transceiver will not change the multiple re-connection mode to original setting.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

English

### Music Streaming and Playback Control

Music streaming is a technique for transferring audio data such that it can be processed as a steady and continuous stream.

Users can stream music from their iPod or other external audio player to their car stereo and listen to the tracks through the car's speakers.

#### WHAT IS A2DP?

**A2DP (Advanced Audio Distribution Profile)** is a *Bluetooth®* profile that allows you to send CD quality stereo music from one device to another without wires. A2DP is able to provide crystal clear music without the hassle of plugging cables. *Bluetooth®* wireless technology with A2DP makes mobile phones, pda's and computers capable of streaming music.

#### WHAT IS AVRCP?

**AVRCP (Audio Video Remote Control Profile)** is another *Bluetooth®* profile that enables music from external audio player to be controlled remotely. AVRCP allows some basic playback control functions such as start/play/stop/pause, volume up/down and next/previous track to an external audio player.

#### ⚠ CAUTION

- The Transceiver works as one way communication to the Transmitter. Thus, please avoid controlling the iPod and Transceiver at the same time as this might cause some correspondence operations between the both devices.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

English

- **Play/Pause a track**

Press and hold the [VOL +] button for 1 second or longer to play or pause the song.

- **Stop a track (For A2DP device only)**

Press and hold the [VOL -] button for 1 second or longer to stop the song.

- **Restart a track (For iPod only)**

Press and hold the [◀◀] button for 1 second to restart the current song.

- **Selecting the next track**

Press and hold the [▶▶] button for 1 second or longer to select the next song.

- **Selecting the previous track**

For A2DP device: Press and hold the [◀◀] button for 1 second or longer to select the previous song.

For iPod: Press and hold the [◀◀] button for 2 second or longer to select the previous song.

- **Adjusting the music streaming volume**

You can adjust the speaker volume during music streaming. Please leave the car audio system volume at the default volume and use the volume controls on the Transceiver to ensure that the volume do not vary too greatly when using different mode of the car audio system.

1. Press the [VOL +] button to increase the volume.

2. Press the [VOL -] button to decrease the volume.

**Notes:**

- There are 19 volume levels with default level setting is 14 upon power up.
- Changing the volume will not affect the internal volume status of the paired device. It will only affect car speakers' volume.
- For A2DP devices, after all 19 levels of volume adjustment have been exhausted, the Transceiver would start reducing/increasing the devices' volume.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

### Using Handsfree with *Bluetooth*® Wireless Technology

English

Note: The Clarion car stereo must activate the telephone interrupt mode to be able to work with the Transceiver. Please refer the car stereo owner's manual of each model for details.

#### Making a call

- **Calling with the phone's keypad**

1. Using the phone keypad, dial the phone number.
2. Press the phone “**SEND**” key - the phone is now connected to the Transceiver and your car stereo system will be muted. Talk as normal to the Transceiver unit, the voice of the person you're talking to will be heard through your car speaker.

#### Incoming call

A ringing tone will be heard. The red and blue LED will alternate blink quickly. Any music streaming will be temporary muted until a call is ended or rejected.

- **Answering a call**

Whenever your car stereo is operating, the Transceiver unit is in standby mode awaiting the next call, when an incoming call arrives, the car stereo is muted automatically and the ring tone is reproduced through your car's speaker.

1. Press the [] button once to answer the call and speak as normal.

You may also answer the call by using your phone's answer keypad. In this case, you can transfer the call to the Transceiver by following the instruction in the section “**Transferring a call**” on page 22. However, some phones will require user to activate transfer call via the phone itself in this case.

#### Note:

- The Clarion car stereo must activate the telephone interrupt mode to be able to work with the Transceiver. Please refer the car stereo owner's manual of each model for details. Make sure that your mobile phone has set the Transceiver as the default headset/handsfree. Please refer your mobile phone owner's manual for the relevant setting.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

- **To reject a call**

User can reject an incoming call with this Transceiver unit.

1. When the car handsfree rings, press the [📞] button once.

**Note:**

- This is dependent on the type of phone.

- **Ending a call**

Use either one of the following methods to end a call:

1. To end a call from the Transceiver unit, press the [📞] button once.
2. End a call from the phone's keypad.

**Note:**

- When making outgoing call from a mobile phone, call cannot be terminated using the Transceiver unit. It can only be ended when the call is connected (conversation). Simply use the phone "END" key in order to terminate an outgoing call.

### Transferring a call

- **To transfer the call to the phone**

During a call, press the [📞] button twice.

- **To transfer the call to the Transceiver unit**

During a call, press the [📞] button twice or use the transfer call function in the phone to transfer call back to car stereo.

**Note:**

- This function is dependent on the type of phone. Some phones are not supported.

## 5. OPERATIONS FOR BLUETOOTH® AUDIO/MOBILE-PHONE TRANSCEIVER UNIT

English

### Adjusting the telephone interrupt volume

You can adjust the speaker volume in a call via your Transceiver unit.

1. Press the **[VOL +]** button to increase the volume.
2. Press the **[VOL -]** button to decrease the volume.

#### Notes:

- There are 19 volume levels where default level setting is 14 upon power up.
- Use the **[VOL +]** and **[VOL -]** controls to adjust the telephone call reception volume and minimize any echo generated.
- Telephone default volume depends on each car stereo model. Please refer your car stereo owner's manual for further details.

### Switching left or right channel output

You can switch to left or right channel output for a call.

1. Move the **[L/R]** selector to the right to enable right channel output.
2. Move the **[L/R]** selector to the left to enable left channel output.

#### Notes:

- If your car stereo supports telephone left/right selection, please make sure that both units (car stereo and Transceiver unit) are set to the same output channel.
- For left-hand drive car, the audio should preferably come out from the right speakers and vice-versa.

### Connecting an external microphone (optional)

You can connect an external microphone to the Transceiver unit via the 2.5mm audio jack input for better voice reception. Audio input source will automatically switch from internal microphone to external microphone. Please consult your local authorized Clarion dealer for external microphone recommendation.

#### Note:

- Please use only 2.5mm jack external microphone.

## 6. COMPATIBLE MODELS

### Supported Clarion car stereo

To enable stereo music streaming, the car stereo must come with AUX function.

To enable handsfree function, the car stereo must have telephone interrupt function.

Compatible with Clarion units from 2007 lineup with TEL and AUX function or consult your nearest Clarion dealer. Please check with your local dealer for compatibility with other car stereo.

### Supported phones with *Bluetooth®* wireless technology

Make sure your mobile phone supports the following *Bluetooth®* profile:

- HFP/HSP (handsfree for mobile phone)

Optional profiles for music streaming in mobile phone:

- A2DP (stereo music streaming)
- AVRCP (remote control function)

Please check your phone's specification for supported profiles.

### Supported device with *Bluetooth®* wireless technology

BLT370 is specially designed and work best with Clarion *Bluetooth®* Audio Transmitter (DGL370) and Cradle for iPod (BC001N/BC002M/BC003V). Please consult your nearest Clarion dealer for the product offer.

## 7. TROUBLESHOOTING

English

	Problem	Cause	Description
Transceiver	The power of Transceiver unit does not turn on	Fuse is blown.	Replace with a fuse of the same amperage (2A) in the LC box. If the fuse blows again, consult your store of purchase.
		Incorrect wiring.	Consult your store of purchase.
	The red or purple LED lights up all the time.	Power-up failure The device may not be start upon power on.	<ol style="list-style-type: none"> <li>1. Power off and on the device until the blue LED blinks correctly.</li> <li>2. Press the reset button.</li> </ol>
	Blue LED lights up all the time. Transceiver is not responding.	The Transceiver has malfunctioned due to some conflicts such as multiple pairing at the same time.	Power off and on the device until the blue LED blinks correctly.
	Cannot pair the car handsfree with the phone	The <i>Bluetooth</i> ® function in your phone is off or car handsfree is off.	The <i>Bluetooth</i> ® function in your phone must be set to Automatic or On. Your phone should be inside the car during the pairing procedure. The car handsfree must be on.
Transceiver	Unable to auto connect with phone upon power up	<i>Bluetooth</i> ® function is disabled in your phone.	The <i>Bluetooth</i> ® function in your phone must be set to Automatic or ON.
		Multiple re-connection mode is off. The auto connection may not be successful if there is no <i>Bluetooth</i> ® link detection for the first and only one re-connection attempt.	<p>Turn on multiple re-connection mode and restart the Transceiver.</p> <p>Manually reconnect via your phone.</p>

## 7. TROUBLESHOOTING

	Problem	Cause	Description
Transceiver	Cannot connect to the car handsfree	The car handsfree may be connected to another <i>Bluetooth®</i> device or your phone may be connected to another <i>Bluetooth®</i> device, such as a headset. You may have paired your phone with another handsfree device.	Disconnect the other <i>Bluetooth®</i> device. Some phones can only be paired with one handsfree device at a time. Please check your phone owner's manual.
	When Transceiver is paired with certain mobile phones (e.g. Nokia 6233), pressing the keypad of the mobile phone causes the audio streaming from the Transmitter to be muted.	This is a feature of the mobile phone: Any audio activities, including keypad tones, are transmitted to the Transceiver unit	Depending on mobile phone software, turning off the keypad tones and alert tones may resolved this issue.
Others	No sound contact between car handsfree and phone	No pairing between car handsfree and phone.	The car handsfree and the phone you are using with it have to be paired to recognize each other, and within range.
		Car stereo volume is too low.	Increase the volume in the Transceiver unit or car stereo if necessary.
	Telephone call is not interrupted to car stereo	Telephone interrupt is off	Set the telephone interrupt to ON.

## 8. SPECIFICATION

English

Compliance	Bluetooth® 1.2
Profiles	A2DP (stereo music streaming) AVRCP (remote control function, e.g. play/stop, volume up/down) HFP/HSP (handsfree for mobile phone)
Wireless range	Class 2: Up to 10m (line of sight)
Sensitivity	- 80dBm
Data rate	Forward: 723kbps   Reverse: 57kbps
Antenna	2.45 GHz chip type
Compression/decompression algorithm	SBC (sub-band coding)
Bit rate	Variable (<350kbps typical)
Stereo audio	16kHz - 48kHz, 16bit (for music)
Mono audio	8kHz, 16bit (communication)
iPod support	MMI support for iPod e.g. play/pause, next/previous track etc
Operating temperature	- 20°C ~ 60°C
Storage temperature	- 40°C ~ 85°C
Dimensions	Approx. 44mm (Width) x 63mm (Height) x 11mm (Depth)
Weight	Approx. 160g
Audio bandwidth	30Hz - 20kHz
Signal-to-Noise Ratio	~ 84dB
Mic input	2.2k ohm
Analog output	Line level (1 Vrms)
1 mic with AEC	a) Adaptive acoustic echo cancellation (~ 48dB) b) Adaptive background noise suppression (~ 12dB)
Voltage source	Max.16VDC
Max current	40 - 50mA
Cable length	2.5m
LC box fuse amperage	2A

## 9. ADDITIONAL INFORMATION

English

### Safe and efficient use

#### Note:

Read this information before using this product.

Changes or modifications to this product not expressly approved by **Clarion** may void the user's authority to operate the equipment.

Please check for any exceptions, due to national requirements or limitations, in usage of equipment with *Bluetooth®* wireless technology before using this product.

### Product care

- Do not expose your product to liquid or moisture or to humidity.
- Do not expose your product to extreme high or low temperatures.
- Do not expose your product to lit candles, cigarettes, or cigars, or to open flames etc.
- Do not drop, throw or try to bend the product as rough treatment could damage it.
- Do not use any other accessories than **Clarion** originals intended for use with this product. Use of non-original accessories may result in loss of performance, damage to the product, fire, electric shock or injury. The warranty does not cover product failures which have been caused by use of non-original accessories.
- Do not attempt to disassemble your product. The product does not contain consumer serviceable or replaceable components. Only **Clarion** service partners should perform service.
- Do not keep the product in an area prone to dust and dirt. Only use a soft damp cloth to clean your product.
- If you will not be using the product for a while, store it in a place that is dry, free from damp, dust and extreme temperatures.
- To reduce risk of electric shock, unplug the unit from any power source before attempting to clean it.

### Installation

Please note that only authorised personnel should install this product. Please check with your car dealer for recommendations on professional installation engineers. Check with your car manufacturer's representative to be sure that all equipment for this product, including additional accessories, is placed in a safe location. If your car is equipped with an air bag, check that the handsfree equipment does not interfere with its function.

This product equipment is made for use in cars with a 12 volt electrical system. Other supply voltages may cause damage to the equipment.

### Radio frequency exposure

This product is a radio transceiver. When in operation, it communicates with a mobile device featuring *Bluetooth®* wireless technology by receiving and transmitting radio frequency (RF) electromagnetic fields (microwaves) in the frequency range 2400 to 2500 MHz. The output power of the radio transmitter is low, 0.001 watt.

This product is designed to operate in compliance with the RF exposure guidelines and limits set by national authorities and international health agencies when used with any compatible mobile phone with *Bluetooth®* wireless technology.

### Driving

Check the laws and regulations on the use of mobile phones and handsfree equipment in the areas where you drive.

Always give full attention to driving and pull off the road and park before making or answering a call if driving conditions so require.

RF energy may affect some electronic systems in motor vehicles such as car stereo, safety equipment etc. Check with your vehicle manufacturer's representative to be sure that your mobile phone or this *Bluetooth®* audio/mobile-phone transceiver will not affect the electronic systems in your vehicle.

## 9. ADDITIONAL INFORMATION

English

### **Electronic equipment**

Most modern electronic equipment is shielded from RF energy. However, certain electronic equipment is not, therefore:

Do not use this product near medical equipment without requesting permission. If you are using any personal medical devices, e.g. a pacemaker or a hearing aid, please read in your mobile phone's User's Guide for further information.

### **Blasting areas**

Turn off all your electronic devices when in a blasting area or in areas posted **turn off two-way radio** to avoid interfering with blasting operations. Construction crews often use remote control RF devices to set off explosives.

### **Potentially explosive atmospheres**

Turn off your electronic device when in any area with a potentially explosive atmosphere. It is rare, but your electronic device could generate sparks. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, clearly marked.

### **Children**

Do not allow children to play this product since it contains small parts that could become detached and create a choking hazard.

## 9. ADDITIONAL INFORMATION

English

### Emergency calls

#### IMPORTANT!

This product and the electronic device connected to the handsfree operate using radio signals, cellular, *Bluetooth®* wireless technology and landline networks as well as user-programmed functions, which cannot guarantee connection under all conditions. Therefore you should never rely solely upon any electronic device for essential communications (e.g. medical emergencies).

Remember, in order to make or receive calls, *Bluetooth®* Audio/Mobile-phone Transceiver, *Bluetooth®* Audio Transmitter and the electronic device connected to the handsfree must be switched on and in a service area with adequate cellular signal strength. Emergency calls may not be possible on all cellular phone networks or when certain network services and/or phone features are in use. Check with your local service provider.



#### CAUTION!

If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

# **Clarion Co., Ltd.**

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# GARANTIE LIMITÉE DE CLARION 2007

Pour le Canada et les États-Unis seulement

À moins d'une contre-indication, les produits Clarion achetés chez un revendeur Clarion autorisé sont garantis contre tous les défauts de matériaux et de mise en oeuvre pour une période d'un (1) an à compter de la date d'achat originelle. Les produits Clarion notés ci-dessous (\*\*) sont garantis contre tous les défauts de matériaux et de mise en oeuvre pour une période de deux (2) ans à compter de la date d'achat originelle, lorsqu'achetés chez un revendeur Clarion autorisé **ET** lorsque l'installation du produit est effectuée par le revendeur.

\*\* DRZ9255 DXZ775USB DXZ675USB DXZ575USB DFZ675MC DPX11500 DPX1800 DPX2250

Tous les câbles, fils et autres accessoires Clarion achetés chez un revendeur autorisé Clarion sont garantis contre tous les défauts de matériaux et de mise en oeuvre pour une période de 90 jours.

**TOUS LES PRODUITS CLARION ACHETÉS CHEZ UN REVENDEUR NON AUTORISÉ PAR CLARION SONT SOUMIS AUX RESTRICTIONS DE GARANTIE SUPPLÉMENTAIRES DÉCRITES CI-DESSOUS.**

Les conditions de cette garantie limitée et l'étendue de la responsabilité de Clarion Corporation of America (« Clarion ») d'après cette garantie limitée sont les suivantes :

- 1. UNE PREUVE DE LA DATE D'ACHAT EST REQUISE POUR TOUTE RÉPARATION SOUS GARANTIE DE CE PRODUIT. DANS LE CAS D'UN PRODUIT LISTÉ CI-DESSUS, BÉNÉFICIAINT DE LA GARANTIE LIMITÉE DE DEUX (2) ANS, UNE PREUVE DE LA DATE D'ACHAT ET UNE PREUVE QUE L'INSTALLATION A ÉTÉ EFFECTUÉE PAR UN REVENDEUR AUTORISÉ SONT REQUISES. TOUTE L'INFORMATION À PROPOS DES CENTRES DE SERVICES SOUS GARANTIE AUTORISÉS DE CLARION PEUT ÊTRE OBTENUE EN COMMUNIQUANT AUX ADRESSES LISTÉES CI-DESSOUS.**
2. Cette garantie limitée sera annulée pour tout dommage encouru lors d'une réparation effectuée par du personnel non autorisé par un centre de services sous garantie Clarion.
3. Cette garantie limitée ne s'applique pas aux produits négligés, accidentés ou ayant subi un usage incorrect, ou dont le numéro de série a été modifié, obstrué ou effacé, ou qui ont été raccordés, installés, ajustés ou réparés autrement qu'en suivant les instructions fournies par Clarion.
4. Cette garantie limitée ne couvre pas l'interférence électrostatique produite ou non par le véhicule, ni le nettoyage ou le réglage de la tête de lecture ou des éléments laser, ni les coûts de manutention pour le retrait ou la réinstallation du lecteur pour réparation.
5. La seule responsabilité de Clarion, d'après cette garantie limitée, est restreinte à la réparation du produit ou au remplacement du produit, à la discrétion absolue de Clarion.
6. Le produit doit être envoyé à Clarion dans son emballage original ou dans un emballage équivalent. Le colis doit être entièrement assuré et tous les frais de transport doivent être prépayés. Clarion n'assumera aucune responsabilité en cas de perte ou de dommages encourus lors du transport.
- 7. LES PRODUITS CLARION ACHETÉS CHEZ UN REVENDEUR AUTRE QU'UN REVENDEUR CLARION AUTORISÉ, INCLUANT TOUS LES ACHATS EFFECTUÉS SUR INTERNET CHEZ UN REVENDEUR NON AUTORISÉ PAR CLARION, NE SONT PAS COUVERTS LES GARANTIES LIMITÉES DE CLARION ET CE, EN ACCORD AVEC LES LIMITES PRÉSCRITES PAR LA LOI. DANS LE CAS OÙ LES LOIS APPLICABLES NE PERMETTENT PAS L'ÉLIMINATION DES GARANTIES SOUS CES CONDITIONS, LA PÉRIODE DE GARANTIE LIMITÉE QUI S'APPLIQUE AU PRODUIT SERA DE QUINZE (15) JOURS À PARTIR DE LA DATE D'ACHAT ORIGINELLE.**
- 8. AUCUNE GARANTIE IMPLICITE NE POURRA S'ÉTENDRE AU-DELÀ DE LA PÉRIODE DE GARANTIE DÉCRITE CI-DESSUS ET CE, EN ACCORD AVEC LES LIMITES PRÉSCRITES PAR LA LOI. CLARION NE POURRA EN AUCUN CAS ÊTRE TENUE RESPONSABLE DES PERTES OU DOMMAGES DIRECTS OU INDIRECTS ENCOURUS PAR L'USAGE DU PRODUIT OU L'IMPOSSIBILITÉ D'UTILISER LE PRODUIT. PUISQUE CERTAINS ÉTATS NE PERMETTENT PAS DE LIMITER LA DURÉE DES GARANTIES IMPLICITES, OU DE LIMITER LA RESPONSABILITÉ EN CAS DE DOMMAGES DIRECTS OU INDIRECTS, CES LIMITATIONS OU EXCLUSIONS PEUVENT NE PAS S'APPLIQUER À VOUS.**
- 9. CETTE GARANTIE LIMITÉE VOUS OCTROIE DES DROITS LÉGAUX PRÉCIS. VOUS POUVEZ POSSÉDER DES DROITS SUPPLÉMENTAIRES SELON VOTRE LIEU DE RÉSIDENCE.**
10. Les lois de l'État de la Californie contrôlent totalement cette garantie limitée, son interprétation et sa mise en exécution.
11. Si vous éprouvez des problèmes de performance du produit pendant la période garantie, veuillez communiquer avec Clarion ou visitez notre site Web à l'adresse ci-dessous afin d'obtenir une liste des centres de service autorisés Clarion de votre région. N'hésitez pas à communiquer avec les Centres de service Clarion, aux adresses ci-dessous, afin d'obtenir une résolution de tout problème relié aux produits Clarion.

Aux États-Unis:

Clarion Corporation of America  
Attn: Customer Service Manager  
6200 Gateway Drive  
Cypress, CA. 90630  
1-800-GO-CLARION  
[www.clarion.com](http://www.clarion.com)

Au Canada :

Clarion Canada Inc.  
Centre de services sous garantie  
2239 Winston Park Drive  
Oakville, Ontario L6H 5R1  
(905) 829-4600  
[www.clarioncanada.com](http://www.clarioncanada.com)



# CLARION 2007 LIMITED WARRANTY

For USA and Canada only

Except as noted, Clarion products purchased from an authorized Clarion dealer are warranted against all defects in materials and workmanship for a period of one (1) year from the date of original purchase.

The following Clarion products noted below \*\* are warranted against all defects in materials and workmanship for a two (2) year period from the date of original purchase when purchased from **AND** installed by an authorized Clarion dealer.

\*\* DRZ9255 DXZ775USB DXZ675USB DXZ575USB DFZ675MC DPX11500 DPX1800 DPX2250

All Clarion cables, wires and other accessories if purchased from an authorized Clarion dealer are warranted against all defects in materials and workmanship for ninety (90) days from the date of original purchase.

## ALL PURCHASES OF CLARION PRODUCTS FROM NON-AUTHORIZED CLARION DEALERS ARE SUBJECT TO FURTHER WARRANTY RESTRICTIONS AS DESCRIBED BELOW.

The conditions of this Limited Warranty and the extent of responsibility of Clarion Corporation of America ("Clarion") under this Limited Warranty are as follows:

- 1. PROOF OF DATE OF PURCHASE FROM AN AUTHORIZED CLARION DEALER WILL BE REQUIRED FOR WARRANTY SERVICE OF THIS PRODUCT. IN THE CASE OF THE TWO (2) YEAR LIMITED WARRANTY FOR THE CLARION PRODUCTS NOTED ABOVE, PROOF OF DATE OF PURCHASE AND PROOF OF INSTALLATION BY AN AUTHORIZED CLARION DEALER IS REQUIRED. INFORMATION ABOUT CLARION AUTHORIZED WARRANTY SERVICE CENTERS MAY BE OBTAINED BY CONTACTING CLARION AT THE ADDRESS LISTED BELOW.**
2. This Limited Warranty will become void if service performed by anyone other than an approved Clarion Warranty Service Center results in damage to the products.
3. This Limited Warranty does not apply to any product which has been subject to misuse, neglect or accident, or which has had the serial number altered, defaced or removed, or which has been connected, installed, adjusted or repaired, other than in accordance with the instructions furnished by Clarion.
4. This Limited Warranty does not cover car static or other electrical interferences, tape head or laser pick-up cleaning or adjustments, or labor costs for the removal or reinstallation of the unit for repair.
5. The sole responsibility of Clarion under this Limited Warranty shall be limited to the repair of the products or replacement of the product, at the sole discretion of Clarion.
6. Product must be shipped in its original carton or equivalent carton, fully insured, with shipping charges prepaid. Clarion will not assume any responsibility for any loss or damage incurred in shipping.
- 7. CLARION PRODUCTS PURCHASED FROM A SOURCE OTHER THAN AN AUTHORIZED CLARION DEALER, INCLUDING ANY AND ALL PURCHASES VIA THE INTERNET FROM A NON INTERNET AUTHORIZED CLARION DEALER, SHALL NOT BE COVERED BY ANY CLARION LIMITED WARRANTY TO THE EXTENT ALLOWED BY APPLICABLE LAW. IN THE EVENT AND TO THE EXTENT APPLICABLE LAW PROHIBITS ELIMINATION OF WARRANTIES UNDER THESE CIRCUMSTANCES, THE APPLICABLE LIMITED WARRANTY PERIOD SHALL BE DEEMED TO BE FIFTEEN (15) DAYS FROM THE DATE OF ORIGINAL PURCHASE.**
- 8. ALL IMPLIED WARRANTIES EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW SHALL HAVE NO GREATER DURATION THAN THE WARRANTY PERIOD SET FORTH ABOVE. UNDER NO CIRCUMSTANCES SHALL CLARION BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT. BECAUSE SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.**
- 9. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.**
10. The laws of the State of California shall govern and control this limited warranty, its interpretation and enforcement.
11. Should you have any difficulties with the performance of this product during the warranty period, please call Clarion or visit our web site for a listing of Authorized Warranty Service Centers in your area. You may also contact the Clarion Customer Service at the address listed below for any service help you may need with Clarion products.

### In USA:

Clarion Corporation of America  
Attn: Customer Service Manager  
6200 Gateway Drive  
Cypress, CA. 90630  
1-800-GO-CLARION  
[www.clarion.com](http://www.clarion.com)

### In Canada :

Clarion Canada Inc.  
Warranty Service Center  
2239 Winston Park Drive  
Oakville, Ontario L6H 5R1  
(905) 829-4600  
[www.clarioncanada.com](http://www.clarioncanada.com)